TWO COUNTY BIRD-BOOKS.1

TO write a history of the birds of Yorkshire, so far the largest of our English counties as to include almost every kind of natural feature to be found in this country, was no light undertaking, and Mr. Nelson is to be congratulated on the conclusion of his labours, extending over many years, and upon the able way in which he has arranged and digested the unrivalled and exceptionally complete mass of material placed at his disposal, which has been accumulated by the numerous ornithologists who, from the time of Thomas Allis (who wrote the first complete list of Yorkshire birds in 1844) down to the present day, have been engaged in working out the local ornithology of this great section of England. This information Mr. Nelson has been able to supplement with his own observations for many years past. The scope of the work is comprehensive. The account

of each species includes particulars of faunistic position, distribution, migration, nidification, folklore, varieties, and Wernacular names; whilst the report on the birds of Yorkshire prepared for the York meeting of the British Association in 1844 Thomas Allis is here published for the first time. A voluminous introduction deals with the physical aspect of the county and the several districts into which the great diversity of its natural features has made it convenient to divide it. Following this, migration, so remarkable on the Yorkshire coast from its geographical posiis duly tion, considered, and the chapter concludes with a review of the avifauna of the county.

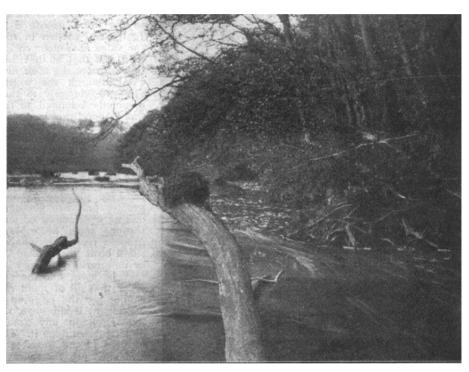
Situate about midway on the eastern seaboard of the British

Isles, and directly opposite the European continent, Yorkshire is sufficiently far south to include species the distribution of which is of the southern type -such as the nuthatch and nightingale, which find in it the northern limit of their range-while it is sufficiently far north to admit of the inclusion of such species as the curlew, dunlin, &c., "which here meet with their southern breeding limits." These remarks, though true on the whole, must not be taken in too literal a sense, for both the last-named birds breed in Great Britain further south than Yorkshire. The author states that the avifauna of Yorkshire, compared with that of other counties, stands unrivalled,

1 (1) "The Birds of Yorkshire. Being a Historical Account of the Avifauna of the County." By T. H. Nelson, with the cooperation of W. Eagle Clarke and F. Boyes. 2 Vols. Pp. xlv+xii+843; illustrated. (London: A. Brown and Sons, Ltd., 1907.) Price 25s. net. (2) "Notes on the Birds of Kent." By R. J. Balston, Rev. C. W. Shepherd, and E. Bartlett. Pp. xix+465; with 9 plates and a map. (London: R. H. Porter, 1908.) Price 20s. net.

not only in its numerical extent, but also-a circumstance of much greater significance-in the inherent richness which is shown by the number of species breeding annually within its limits. That this should be so would be anticipated by anyone who has read the topographical description of the county, in which are found wild mountainous country, heathery moorlands, and romantic dales; pasture and arable land, woodlands, marshlands, chalk wolds, and a coast line 117 miles long, and one of the most diversified possessed by any English county. We find, indeed, in Yorkshire almost every kind of natural feature that England affords.

The configuration of the coast line materially increases the advantage of the position, which is still more enhanced by the possession of two such projections as Spurn Point and Flamborough Head (the latter on the same parallel of latitude as Heligoland, the island which is so famous for the vast hordes of



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Fig. 1.—Unusual Site for a Dipper's Nest, on the River Nidd. From "The Birds of Yorkshire."

migratory birds which pass and repass it in spring and autumn), which as a locality productive of rare birds has few equals.

We accordingly find Yorkshire accredited with a list of 325 species after excluding 21 recorded on insufficient evidence. Of these no fewer than 123 are considered to be annual breeders. It is in this list of breeding species (which it owes to its size, diversity of natural features, surface, soil and climate, and to its peculiar geographical position) that the strength of the Yorkshire list mainly consists.

Among the resident species are the nuthatch, woodlark, and lesser spotted woodpecker, which here find the northern limit of their general distribution in Britain during the breeding season; the raven, buzzard, and peregrine falcon-now reduced to a few pairs—as well as the goldfinch and the sheldrake, both of which are local. The nightingale, reedwarbler, wryneck, turtle dove, and stone curlew

NO. 2005, VOL. 77

camong the summer migrants) reach in Yorkshire the northern limit of their annual distribution during the breeding season. If we add to these and other well-known midland and southern species the very local pied flycatcher, which is common in many localities, and such moorland and fell birds as the merlin, twite, dipper, grey wagtail, grouse, golden plover, dunlin, and curlew, various wild ducks, and the numerous rock birds which resort to the sea cliffs in the nesting season, we get a breeding avifauna which is probably unequalled by that of any block of adjacent English counties equal to Yorkshire in size, although it is surpassed by that of North Wales, with a much smaller area. Yorkshire is, however, singularly deficient in terns.

Among the many rare and accidental visitors may be mentioned the Siberian meadow bunting (the only

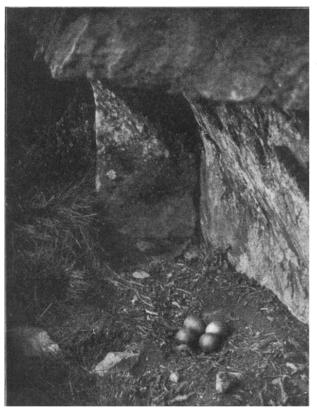


Fig. 2.—Peregrine Falcon's Eyrie, North-west Yorkshire. From "The Birds of Yorkshire."

known European example), the cuneate-tailed gull—better known as the wedge-tailed or Ross's gull—and Bulwer's petrel, which were both until recently unique as British specimens, the desert wheatear, rufous turtle dove, McQueen's bustard, &c. Like other districts, Yorkshire has lost several breeding species, e.g. the kite, the harriers, bittern, bustard, grey geese, avocet, ruff, godwit, and black tern. Probably the article which will claim the most general attention, and to which many ornithologists will turn first, is that on the guillemot and the famous "loomery" on the Flamborough cliffs. A most interesting and valuable account of this bird and its breeding habits, and the extraordinary variation in the colour and markings of its eggs, will be found here; as also of the practice of climbing for eggs carried out on the Yorkshire cliffs, accompanied by some excellent illus-

trations, which make the account given quite clear to those who have never been present at this harvest of the cliffs. Notwithstanding the fact that about 80,000 eggs is the average yearly "take," it is stated that there is no diminution in the numbers of the birds. But the egg collecting is carried out with some care, some portions of the cliffs being "fallowed" occasionally; and, moreover, there are dangerous parts of the cliffs which are never climbed, and in these places the birds hatch out their first eggs without interference.

In the carefully prepared articles on each species, the history in the county of the declining or recently extinct birds is fully given, every bit of available evidence and information having been most praiseworthily preserved. Especial attention may be directed to the excellent articles on the raven,

the rarer birds of prey, and the great bustard. A point is made of the earliest allusion to each species as a Yorkshire bird. In this connection we notice that the author has included as an early reference to the black grouse a letter from Fr. Jessop to John Ray, written in 1668, saying he had stuffed the skins of a moor cock and moor hen. We may point out that at that time these names were used to designate the cock and hen of the red grouse. For although the word grouse is now applied almost exclusively to the red grouse, it probably originally belonged to the black grouse or black game, our "grouse" being commonly spoken of until comparatively recent times as moorgame. That the latter was the bird referred to by Jessop is quite clear from another letter addressed by him to Willoughby (vide Derham's "Philosophical Letters," p. 367). The work is lavishly illustrated, and many of the illustrations are most interesting, or give pleasing scenes of bird-life. But the greater part are photographs of nests and eggs, and as satisfactory or unsatisfactory as such illustrations must be. Many, indeed most, photographic representations of the nests and eggs of small birds are "faked"—the nests tilted forward or unnaturally exposed in order that the contents may be seen, and the eggs must be arranged in order that all of them may come into view. You cannot see the eggs in a reed-warbler's nest by looking at it sideways, nor can you see the whole five eggs in any small nest without looking directly down upon it. Tits' nests are not naturally exposed to the gaze. Pictures of nesting scenes and sites are far more valuable.

The photographing of birds' nests has been rather overdone. A large proportion of such pictures are worth little, and many of them do not really represent what would be seen by the observer; and it is to be regretted that in their desire to get prints of the nests of different species

the disciples of this new sport have made many a pair of birds desert their eggs, and by keeping away their parents have caused young birds to suffer from prolonged exposure to cold, from which they so often do not recover. No nest of a really rare bird, at all events, should be subjected to risks of this kind. The same species can always, if it is really desirable, be photographed where it is comparatively common.

But there are many good and useful pictures in these volumes. The dipper's nest on a branch, the sparrow-hawk's, showing the tufts of down; the falcon's eyrie, and the crow's nest showing the tree, may be mentioned; while sites such as Cautley Crag, the island in Swinsty Reservoir, the Humber mudflats at Spurn, Hornsea Mere, and the many views of cliff scenery, as well as the snow scene with red grouse sitting on the roof of a moorland cottage in Teesdale, illus-

trate most excellently the ornithological characters of The errata, in which there is a curious misprint, is not quite complete, and omits to state that lesser spotted woodpecker should be greater (p. 276), and blue tit should be great tit (p. 114). There are two indices, but unfortunately no map.

The latest work on the birds of Kent (which from its title, indeed, does not claim to be a complete history of the subject) is founded on the material brought together in connection with a certain area of that county; but in that limited portion of the county it was noticed that the avifauna would scarcely be of sufficient importance to fill even a small work. It was therefore found advisable to take in the whole of the county. It was also thought desirable to collect all the material hitherto written, and give to those who have done so much towards our knowledge of the birds of Kent full credit for their observations. This has in the main been carried out, and the result has been a compilation giving us a great deal of information about the birds of Kent. Indeed, so anxious have the authors been to give all possible credit to those who have written anything about the local ornithology that they have been misled into including in their book a number of notes and observations which were not worth reproduction, and the discursiveness of which has made it extremely difficult to arrange the facts in the present work in an orderly and systematic manner. In fact, the book is very well described by its title, and although the reader has never been led to expect a systematic history (from a local point of view) of the birds of Kent, the book is a storehouse of facts relating thereto.

We should have been glad to have a complete book on the subject to fill up a blank in the county bird-book shelf; a volume with more personal observations from the authors, and a compilation more com-The present volume has not been brought plete. up to date. For instance, a valuable paper published in the Zoologist so long ago as February, 1907, has been quite overlooked. Had this been consulted the sheldrake might have been added to the list of ducks breeding in Kent, while the status in the county of the shoveller and some other ducks, as given in the volume under notice, would have been somewhat modified. Nor has the information relating to the various birds always been brought down even to

recent years. Concerning the guillemot breeding on the Kentish coast, we have a description of the breeding colony in St. Margaret's Bay, written so long ago as 1852, and a note on the same made in 1887, but nothing more recent in the way of exact information about the bird breeding on the coast at the present day, although we are told that the bird is, during the summer and breeding season, very numerous. It would surely have been worth the while of one of the authors to ascertain the exact conditions of the breeding place or places after the lapse of twenty years. This is only one instance out of several. Again, on turning to the articles on the birds more particularly associated with Kent, we find that the greater part of that on the Sandwich tern consists of matter written in the eighteenth century, and we are left in doubt as to whether this bird still breeds

The article on the Kentish plover is more satisfying, although it consists almost entirely of quotations (excellent in themselves), with no qualifications, remarks, or annotations by the authors. An exact statement of the status in Kent of each bird would have been welcome. Kent is credited with a list of 320 species, but of these the black grouse is stated to have long been extinct. We cannot quite follow the authors in

their application of this word when they go on to say that many of the birds, which might also come under the same word, such as the crane, bustards, cream-coloured courser, &c., are likely to become occasional visitors, although comparatively extinct in the county (italics ours). There are certainly no grounds for calling the last-named bird "extinct" in the county, as it has never been anything more than a purely accidental straggler to these islands; while the other two species are absolutely, and not only comparatively, extinct as native birds in Great Britain, although they may occur from time to time as visitors. Speaking of the rarer visitors to Kent, the authors remark on one very extraordinary circumstance, viz. that a very large number of the rare seed-eating and other birds should have been found on the Sussex coast, whereas none of them have been observed in the adjoining county of Kent; and the suspicion here expressed that most of these birds have been introduced by human agency has certainly been entertained by many people.

The introduction contains an excellent topographical account of this maritime county (with its 140 miles of coast lapped by tidal water) and its natural features. There is an index, and a map of a handy size and sufficient for its purpose. The frontispiece to this well-got-up volume is a picture from a photograph of a bit of woodland with a woodcock on her nest, and is one of the most beautifully executed and successful pictures of this kind we have ever met with. The difficulty in at first seeing the sitting bird, and the failure of the eye to pick it up at once on again glancing at the picture, as well as the way the figure and details of the bird seem to grow on the sight when once it is located, or located once more, is an admirable representation of the real facts of such cases. The other eight full-page plates depict, birds-like the masked shrike, which has only occurred once in Great Britain-especially associated with Kent, and (especially the one named) are very welcome. But they would have been more useful had they been more correctly coloured. The wing coverts of the lesser kestrel should not have been grey, and the legs of the avocet should have been bluish-grey and not olive-green, a colour which has been also used for the legs of the Kentish plover instead of the correct black or brownish-black. Ornithologists will be glad to have the voluminous literature relating to the birds of Kent collected in this nice-looking volume, the paper, binding, and general get-up of which do the publisher great credit.

MODERN NITRE BEDS.

E VER since the invention of "villainous saltpetre," the provision of a sufficiency of nitrates has been one of the preoccupations of a ministry of war, and the necessity has become greater rather than less under the conditions of modern warfare. The potassium nitrate that was required for the fabrication of gunpowder is now replaced by the nitric acid used in making the various types of nitro-explosives, but it is always the nitric ion that has to supply the oxygen, and the consumption in a modern battle attains a magnitude of which our immediate predecessors using black powder had no conception. Indeed, one truly scientific argument against war may be drawn from the enormous losses it occasions in the world's limited stock of combined nitrogen.

Up to the middle of the nineteenth century, India was the only source of nitrates on a large scale, and though a certain amount of nitre was recovered from the efflorescence of the walls of cellars and from artificially made beds of earth mixed with decaying animal

annually on the coast or not.